

Gender Norms and Crime

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Abstract

What is the role of culture in gender convergence in crime? Using the 1940 US census that contains data on the entire US population, and the epidemiological approach I investigate the role of gender norms in the probability to commit crimes, separately for women and men. Controlling for individual characteristics, I find that first and second generation immigrants to the US from countries with more conservative attitudes towards the role of women in society are less likely to commit crimes. The effect is always significant for women, while for men it is significant in most of the specifications. The relative effect is almost twice as large for women than for men. For the first generation of immigrants a decrease by one standard deviation in gender gap increases the probability to commit crimes by around 25% for women and by 15% for men, while for the second generation the increase is around 40% for women and 25% for men. According to my results, as societies become more culturally gender equal we should expect to observe more crimes committed by women and, to a lesser extent, by men.

Keywords: Gender Gap in Crime, Crime Incentives, Culture

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1 Introduction

Does culture explain, at least in part, gender differences in the decision to commit crimes? Guiso *et al.* (2006) define culture as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation”. Countries with similar institutions or economic development can be extremely different in terms of culture. Recent empirical literature has documented the relevance of beliefs and social values on gender differences in education, participation to the labor market, competitiveness (Giuliano, 2020). Yet, there is no study that tries to examine whether gender culture - the social attitudes toward women and their role in society - affects the decision to participate in criminal activities. The main empirical challenge is to separate the role of culture from that of the environment. In line with the literature, I use “the epidemiological approach” that focuses on the variation of outcomes for groups of immigrants coming from different countries of origin but residing in the same country. Immigrants share the same culture of their country of origin and the same institutions and environment of the country where they live thus allowing to disentangle the effect of culture from that of institutions and economic conditions. This approach has been used to study the role of culture on labor force participation, savings, redistribution, fertility, etc (Fernández, 2011).

In this research work I use data from the 1940 US Census (the complete US population). Since there are no data that can be used as a proxy for gender attitudes at country level back in 1940, I construct them selecting all individuals in the Census who were born abroad. The US, with its massive migration flows from different countries in the world, represent a unique setting to adopt the epidemiological approach. I use information about their education, employment¹ and fertility choices². to construct aggregate variables that reflect the preferences, beliefs and values of women about their role in society. The advantage of constructing these measures using data on migrants is that they are less affected by the economic and institutional environment of the country of origin (this is especially true for the employment status), thus

¹Farré & Vella (2013) show that a woman’s work behaviour is correlated with that of women in her country of ancestry and that cultural attitudes regarding the role of women in the family and the workplace are transmitted across generations. The influence of gender culture on female employment is also well documented in Campa *et al.* (2011).

²Vogl & Freese (2020) using US data over the period 2004-2018 show that higher-fertility individuals and their children are more conservative on, among other things, gender roles.

carrying a lot of information about their values and beliefs. In other words, the economic and institutional factors that might influence, for example, the decision to work, are the same for all immigrants. The disadvantage is that immigrants might be a positive or negative selection of the population in the country of origin. For example, a recent paper by Lach & Sicherman (2022) using data over the 1970-2019 period show that an increase in gender discrimination decreases the share of women immigrating to the U.S. from their country of origin.

I use micro level data on the first and second generation of immigrants to study whether the probability to be a criminal depends on the gender culture of their countries of origin, separately for men and women. The advantage of using first generation immigrants is that their culture is strongly influenced by that of their country of origin. The disadvantage is that outcomes might be influenced by the barriers faced by immigrants (i.e. linguistic and communication barriers, lack of recognition of experiences done abroad, discrimination). On the other hand, the second generation faces fewer immigration specific obstacles but the culture of its ancestors has been contaminated by the environment in which they were born and live, even though there is evidence in the literature that the persistence of culture for the first two generation is very strong (Giavazzi *et al.* , 2019). In this paper I aim at investigating whether, after controlling for individual characteristics (age, marital status, race, employment and number of children) that might affect the decision to be a criminal, the role of gender norms still plays a role. In other words, I am interested in measuring the role of gender culture netting out the individual socio-economic incentives to commit crimes.

As a first preliminary evidence of the relationship between the probability to be a criminal and gender norms, Fig.1 shows that the correlation between the proxies I use for gender norms (gender gap in employment, in education, an index of fertility and a factor constructed using the previous three variables) by country of origin and the probability to be a criminal is clearly negative. But in this figure I am not controlling for several confounding individual factors, observable and unobservable ones, that might bias the results. For example, age might positively influence the decision to commit crime and, at the same time, older people might be more conservative in their gender attitudes thus generating a positive correlation with the measures of gender gaps.

My results show that, as gender gaps shrink, we should expect women to commit more crimes

even controlling for individual characteristics and economic incentives. Results for men are less clear cut but, whenever significant, they go in the same direction as for women. The relative effect is almost twice as large for women than for men. For the first generation of immigrants, a decrease by one standard deviation in gender gap increases the probability to commit crimes by 25% for women and by 15% for men. For the second generation the increase is around 40% for women and 25% for men.

The paper is structured as follows: in section 2 I present the literature review, in section 3 the data and the sample selection, while in section 4 I discuss the analysis and the results. Section 5 is devoted to some robustness checks. Finally, section 6 presents the conclusions.

2 Literature Review

Sociologists, criminologists and psychologists have extensively investigated the differences in behavior between men and women in crime. The early literature on this subject, started by Lombroso and Freud, claims that female criminals were just anomalies and that they showed biological and psychological traits that were very similar to those of males. Later on criminologists and sociologists used other paradigms to explain female participation in crime, stressing the importance of socio-cultural factors and emphasizing that the role of gender in the crime mirrors the role of gender in wider society. They argued that if the gender gap in crime was the result of biological differences between men and women it would not change over time or space, which it clearly does. A “gender equality hypothesis” emerged, arguing that the reduction in the gender gap in crime, along with its variation across countries (developed and developing) and urban and rural areas, was related to the reduction in gender gaps in other areas of life. Economists started contributing to the understanding of criminal behavior in 1968, when a pioneering study by Gary Becker looked at criminals as rational individuals who decide to commit a crime if their expected benefits of committing the crime are higher than their expected costs. In other words, his model predicts that when all the other variables are held constant, a change in the incentives to engage in criminal activities would lead to an increase (or a decrease) in the number of crimes committed. The decision to commit crimes depends, among others, on the probability of being caught and the sentence’s

length, the disutility of going to jail (that in turns it might depend on having children or, generally speaking, someone to take care of), the expected earnings from the illegal activity, the work opportunities in the legal market and the risk aversion. But almost all studies of criminal behavior focus only on men. This is a severe shortcoming for understanding female behavior as there are bound to be many differences between men and women concerning what motivates their behavior, and these differences might easily imply different policies to reduce the propensity to commit a crime. There are just a few studies that use an economic approach to study female criminals. In an early study, Bartel (1979) investigates the determinants of female participation in crime through an Ehrlich type model of time division using U.S. data in 1970 in 33 different States. She uses the number of female arrests as the dependent variables and she finds that probabilities of conviction and arrest have a deterrent effect on females in some property crimes (burglary, robbery and auto-theft), but not in the crime that women commit the most, larceny. After about 30 years without any research on female crime, a recent study by Gavrilova (2019), using US data on property crimes, looks at whether women are discriminated against not only in the legal job market but also in the crime market and finds discriminatory bias in male and female partnering to commit a crime. Discriminatory bias in partnership formation to commit a crime is thus another element that might partly explain the gender gap in the crime market. It could be that the reduction in the gender bias in other dimensions might lead to a reduction in the gender bias in the crime market, thus increasing the number of women involved in criminal activity. Corman *et al.* (2013) find that the 1996 welfare reform in the U.S., aimed at incentivizing female work, led to a decrease in female arrests for serious property crimes by 4.4 - 4.9%, while there was no significant effect on violent crimes. Campaniello & Gavrilova (2018) using a large administrative dataset from the U.S. (the National Incident Based Reporting System) with data on individuals from 1995 to 2010, document a gender gap in the number of property crimes: only 30% of the these crimes are committed by women. They investigate whether there is a gender difference in the probability of arrest or in risk aversion (two of the costs of engaging in crime) and in illegal earnings (one of the benefits of engaging in crime) that might explain the difference in crime propensity. Their study finds that there is a gender difference both in the probability of arrest and in illegal earnings. Men have lower rates of arrest and higher illegal earnings, suggesting

that men tend to have higher criminal ability than women. But when controlling for the fact that women tend to select the type of crime they commit based on their comparative advantage (most women who commit crimes commit shoplifting), the difference in ability disappears or shifts in favor of women. The study also finds that women in the crime market are more risk-averse than men, just as they are in the labor market. These findings partly explain why there are fewer women than men in the crime market: women face, on average, higher expected costs than men for committing a crime. The economic literature on female criminals is still scarce and my project aims at filling a specific gap.

3 Data and Sample Selection

For my analysis I use the Integrated Public Use Microdata Series for the United States (IPUMS USA) that, thanks to a collaboration with Ancestry.com, makes available the complete U.S. Census microdata for the period 1850-1940. I use data on the year 1940 for a number of reasons: i) it is the most recent one that contains the complete population ii) it is the first Census with individual information about education, hours/weeks worked and about the number of children, iii) prior to 1940 non-inmates (such as employees) in institutions are classified as institutional residents and this would not allowed me to correctly identify criminals. For my empirical strategy I use, separately, first and second generation immigrants. For this reason, I selected two groups of people: 1) all the individuals residing in the United States in 1940 who were born abroad and all the individuals who were born in the US from immigrants parents. I generated the country of origin “United Kingdom” by adding all the individual who were born in England, Scotland and Wales. Sometimes, in the 1940 Census there is no indication of the country of origin but of the geographical area (i.e. Northern Europe, Southwest Asia). I eliminated all (but Africa) these geographical aggregates because my objective is to capture the gender culture that may vary when considering large areas that go beyond the national borders. The only exception is Africa because for all migrants from that continent there is no indication of the specific country of origin. I also eliminated U.S. Virgin Islands, Guam Atlantic Islands, West Indies, Pacific Islands because they are geographically sparse islands that might be culturally very different from each other and/or belong to the US. The vari-

able of interest in my empirical analysis is a measure of the gender culture at the country of origin level. Since there are no data on the gender gap by country in the year 1940, I used information on the first wave of migrants and I aggregate it at the country of origin level, to construct measures of gender equality by country. The advantage of using information on the gender culture of first generation immigrants is that it measures more precisely their values and beliefs. Furthermore, there is large evidence in the literature about the persistence of culture among immigrants. First generation migrants....Using information about first generation migrants to construct measures of gender norms might also help to reduce the measurement error generated by differences in data collection methods and classification by country (Antecol (2000)). I constructed three measures that take into account socio-economic behaviours that are strongly affected by gender norms and values that, in turn, are driven by culture and traditional beliefs: years of education, labour force participation and fertility. The first two indexes aggregate, separately, the mean value of education (years of school) and employment X at the country of origin level, j , for females f and males m :³.

$$\frac{\bar{X}_{mj} - \bar{X}_{fj}}{\bar{X}_{mj}} \quad (1)$$

The third measure is a fertility index that I constructed dividing the mean number of children per woman (for each country of origin), C , by the mean number of children in Japan which is the country with the largest number of children per woman.

$$\frac{\bar{C}_{fj}}{\max \bar{C}_f} \quad (2)$$

For all the three indexes I keep those countries that have more than 50 observations.

The dependent variable in the empirical analysis is the probability to be a criminal. I defined an individual as a criminal if, in the 1940 Census, he/she resided in a correctional institution or in a federal/state correctional, a prison, a penitentiary, a military prison, a local correctional, a jail, a school juvenile delinquents–public, a reformatory, a camp or chain gang, a house of correction. ⁴

³To reduce the concern of endogeneity I have calculated the leave one out mean.

⁴In the IPUMS data there is no information about which crime they committed.

As for the individual characteristics, I use information on age, marital status, years of education, race, number of children and employment status.

Table 1 shows the descriptive statistics of the gender gaps measures. The sample contains 51 country (excluding Africa e togliendo Guam) and more than 9 million observations. The average gaps are very similar for the first and second generation of migrants ⁵. The average education gap is (7%) for the first generation and (10%) for the second one. There are just 10 (ho già escluso Guam) countries where women are, on average, more educated than men ⁶. The education gap goes between -28% (Philippines) and 35% (Iraq). The average employment gap is way higher than the education one and is equal to 77% for the first generation and 78% for the second one. It goes from 50% of Thailand to 85% of the Netherlands and Albania.

Table 2 shows the individual descriptive statistics of the first and second generation of migrants. The number of observations for the second generation of migrants is lower because in the 1940 Census only the respondents whose names were recorded on specific lines on the census form (they represent 5% of the population) or were living with their father/mother were asked the place of birth of their mother and father. This explains why all the individual characteristics of the second generation immigrants (with the exception of *Education* and *White*) have a lower average compared to the second generation (number).

4 Analysis and Results

4.1 Empirical strategy and Results

I estimated the following model, for both the first and second generation of migrants, separately for women and men:

$$C_{isj} = \beta_0 + \beta_1' X_i + \beta_2 G_j + \alpha_s + \varepsilon_{isj} \quad (3)$$

where C_{isj} is a dummy variable that is equal to 1 if the individual i is a criminal and 0 otherwise, s is the US state of residency, j is the foreign country of birth (for first generation

⁵I just keep those individuals whose parents were born abroad in the same country. As a results, Guam, Iraq and Indonesia are not present in the second generation analysis.

⁶Bulgaria, Canada, China, Estonia, Finlandia, France, India, Indonesia, Korea, Philippines.

immigrants) or the country of birth of parents (for second generation immigrants)⁷. My variable of interest is G_j , that is, respectively, the gender gap in education, in employment and the fertility index. All these three measures are a proxy for the gender norms in the country of origin (see equation 2)

The vector X_i contains individual characteristics which vary across the different specifications, α are US states fixed effects (FEs) that capture all the unobserved, time-constant factors that affect the probability to become a criminal, while ε are the idiosyncratic errors. Since the variable of interest varies by the country of birth of migrants, I cluster the standard errors at this level. Odd columns of Tables 3, 4, 5 and 6 show the results not controlling for individual characteristics. In columns 1 and 2 the proxy for gender norms is the gender gap in unemployment, in columns 3 and 4 is the gender gap in education and in columns 5 and 6 is the fertility index.

Table 3 shows the main results for the first generation of female migrants. For all the three proxies, increasing by one standard deviation the gender gap would decrease the probability to be a criminal by about 25%. It is reassuring that the three proxies produce an effect on the dependent variable that is very similar in magnitude.

Table 4 shows the main results for the first generation of male migrants. Increasing by one standard deviation the gender gap in employment and in education would decrease the probability to be a criminal by 15%. The coefficient on the third proxy, the fertility index, is not significant.

As for the second generation of immigrants, I select all those individuals whose parents migrated from the same country (they represent 87% of the total number of migrants) with the idea that the transmission of values and beliefs is stronger.

Tables 5 and 6 show that the effect of more conservative gender norms on the probability to be a criminal is always negative and significant for the second generation of immigrants. As for women, an increase of one standard deviation in the gender gaps, would decrease their participation in crime by 32% - 43%. For men, the decrease in crime would be between 22% and 27%.

⁷In the empirical analysis for second generation immigrants I just keep the individuals whose parents were both born in the same country. The reason is that the cultural transmission is stronger.

Unfortunately, I do not have information about the typology of crimes committed. One possible concern could be that women were mainly incarcerated for abortion. Women who have abortions are less conservative and my results would imply that women from more conservative countries have less abortions. (Bauernschustera *et al.* , 2022) in 1937, the U.S. Court legalized birth control. It was then embraced by the public and the medical profession. Also the American Medical Association’s Committee on Contraception tentatively approved contraception. Still, in many U.S. states advertising and sales bans in relation to contraception remained in place until the end of the 1960s. If considered absolutely necessary, women were also referred to doctors for therapeutic abortions,

4.2 Latent Variable Approach

Gender culture is the variable of interest in my paper but it is not directly observed. For this reason, as an additional empirical approach, I use a factor analysis. The idea is that the value of gender norms, the latent variable, makes people respond as they do on the observed regressors that I use as proxies in my empirical analysis: the gender gap in education and in employment, and the fertility index. I estimate the same model as in Eq. 3 where my variable of interest is a factor, the *Gender Gap Factor*, constructed as a weighted average of the three different measure of gender gaps, where the weights are based on the correlation structure of these variables. Results for the first generation of immigrants are shown in Table 7. Using the factor analysis I find an even larger effect of conservative gender norms on crime for women. An increase by one standard deviation in the factor that I constructed decreases the probability to be a criminal by 36% for the first generation of immigrants and 48% for the second one. As for men, the results are only significant for the second generation with an increase in the probability to be a criminal by 30%. Results for the second generation are shown in Table 8.

4.3 Selection

To measure gender norms in the country of origin I use information on first generation migrants to the U.S. This might be a selection of individuals who are actually different from those who remained in their country. If this is the case, it would be unclear whether I am

measuring the role of culture or just intergenerational transmission of values for a selected group of individuals. To investigate whether migrants to the US are different, in terms of their gender culture attitude, from their counterparts who remained in their country of origin, I estimate 3 using a measure the Gender Gap Index taken from the *The Global Gender Gap Report 2006* of the World Economic Forum ⁸. The Gender Gap Index (WEF GGI) goes from 0 (inequality) to 1 (equality) and is constructed as an average of four subindexes: economic participation and opportunity, educational attainment, health and survival, and political empowerment. As already discussed in the paper, the persistence of culture is well documented in the literature. If culture is, on the whole, evolving slowly, then this variable should also have explanatory power for individual women's labor supply Fernandez (2007). This is true also in my data. Graph 3 shows a clear negative relationship between the Latent variable that I have constructed in section 4.2 using data from the 1940 Census and the Gender Gap Index of the World Economic Forum that uses data from 2006.

5 Robustness [to be completed]

To make sure that my results are not biased by the particular specification I used, I perform different robustness checks.

Since my outcome is a binary variable, I run the regressions using a logit and a probit estimator. Then, I include in my main specification the variable *Employed* and *Number of children*, a dummy that measure whether an individual is on the labor force. I have not included it in the main regression because it might be measured with error. The individual is asked whether he has worked in the last ...but he/she is in jail! In another robustness check I include continent fixed effect thus exploiting variation within continent that might be explained by cultural factors that are not related to gender norms. Finally, I use the WEF Gender Gap Index 2006 as a measure of gender gaps.

Results for the first generation are in Tables 9 and Tables 10, while for the second generation are in Tables Tables 11 and Tables 12.

⁸the first of a series of yearly reports that provide relevant information on several legal and social aspects of the gender gap in over 115 countries

6 Conclusions

The number of women committing crimes is on the rise and the drivers of this new tendency are unclear. It is likely that there are different mechanisms that explain the slow gender crime convergence of female and male criminality. This paper investigates one of them: the role of gender culture in the decision to commit crimes, separately for women and men. The hypothesis that I tested is whether individuals who have more gender equal cultures are more likely to commit crimes. To answer this question I use the so called epidemiological approach and I find that people from more conservative cultural background in terms of gender roles are less likely to become criminals. This is especially true for women. To make sure that my results are not biased by individual characteristics that measure incentives to become a criminal, I control for a number of demographic and socio-economic variables. Results hold even after adding these controls. As for men, the effect of gender culture is not always significant and, in all specifications, the magnitude of the effect is way lower than for women. This might explain, at least in part, the gender convergence in crime as societies become more gender equal.

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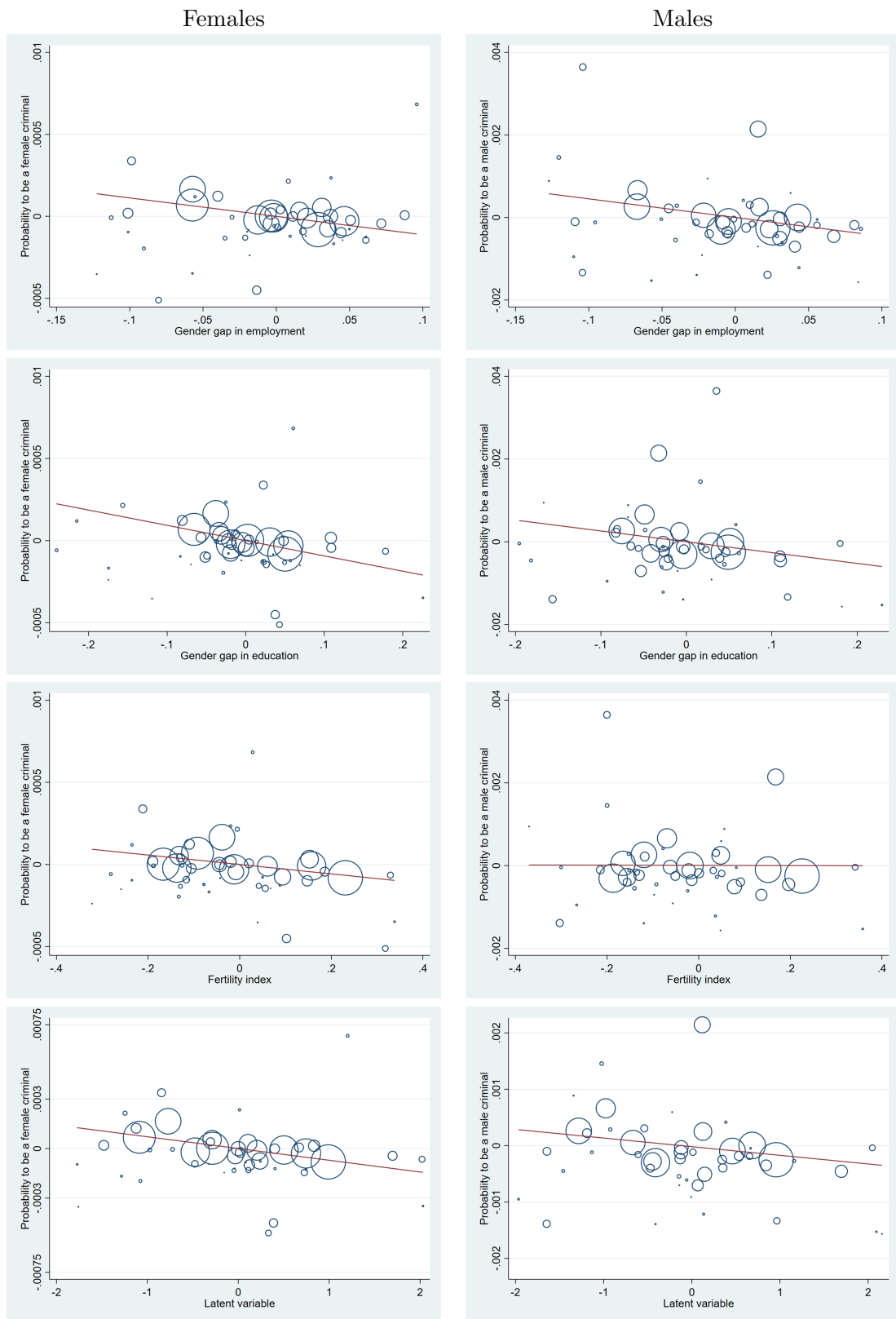


Figure 1: Gender gaps and crime. First generation of immigrants.

Notes: Correlation between three measures of gender norms (gender gap in employment, gender gap in years of school and an index of fertility) by country of origin and the probability to be a criminal (residuals). Circles are proportional to the number of criminals in each country of origin.

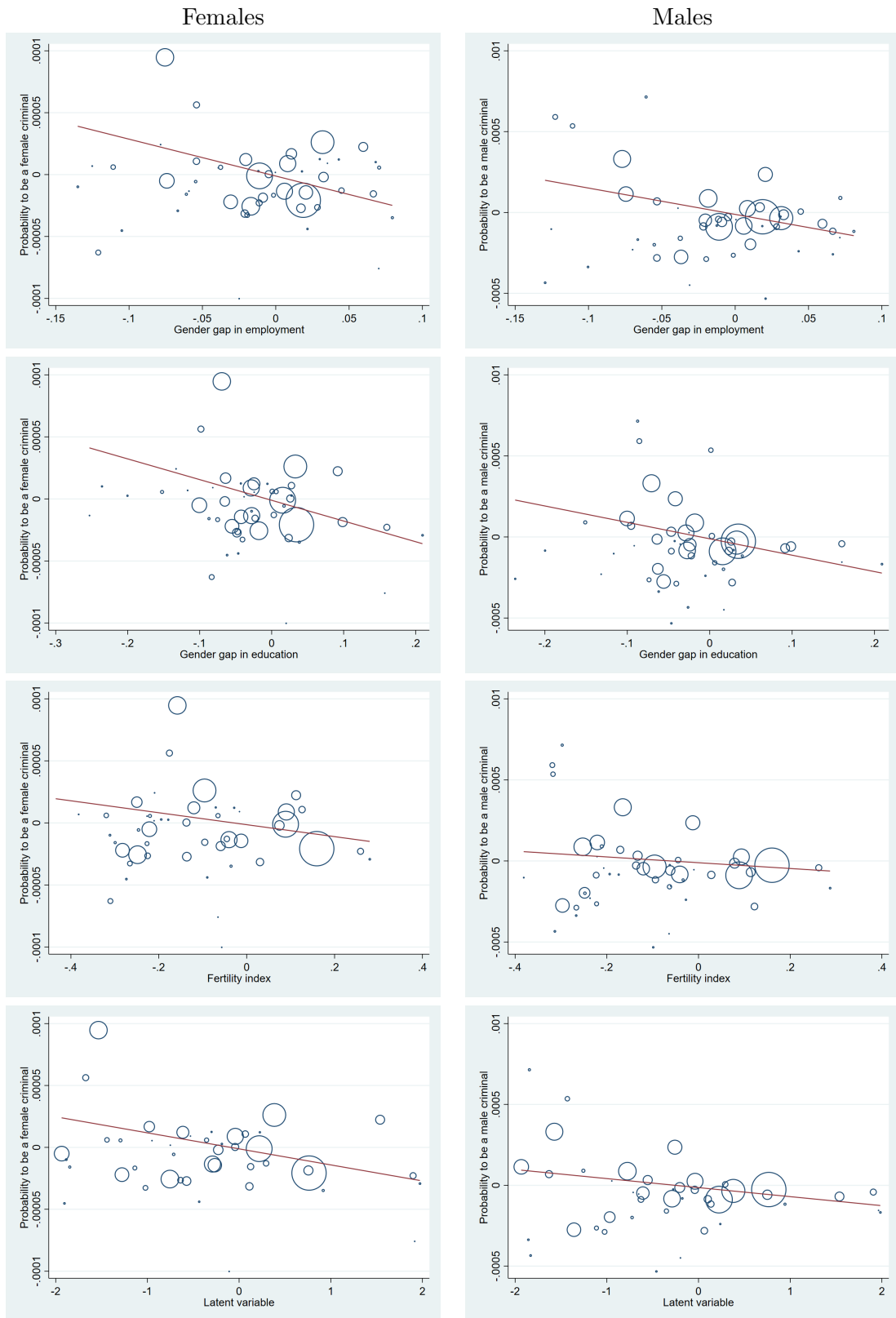


Figure 2: Gender gaps and crime. Second generation of immigrants.

Notes: Correlation between three measures of gender norms (gender gap in employment, in years of school and an index of fertility) by country of origin and the probability to be a criminal (residuals). Circles are proportional to the number of criminals in each country of origin.

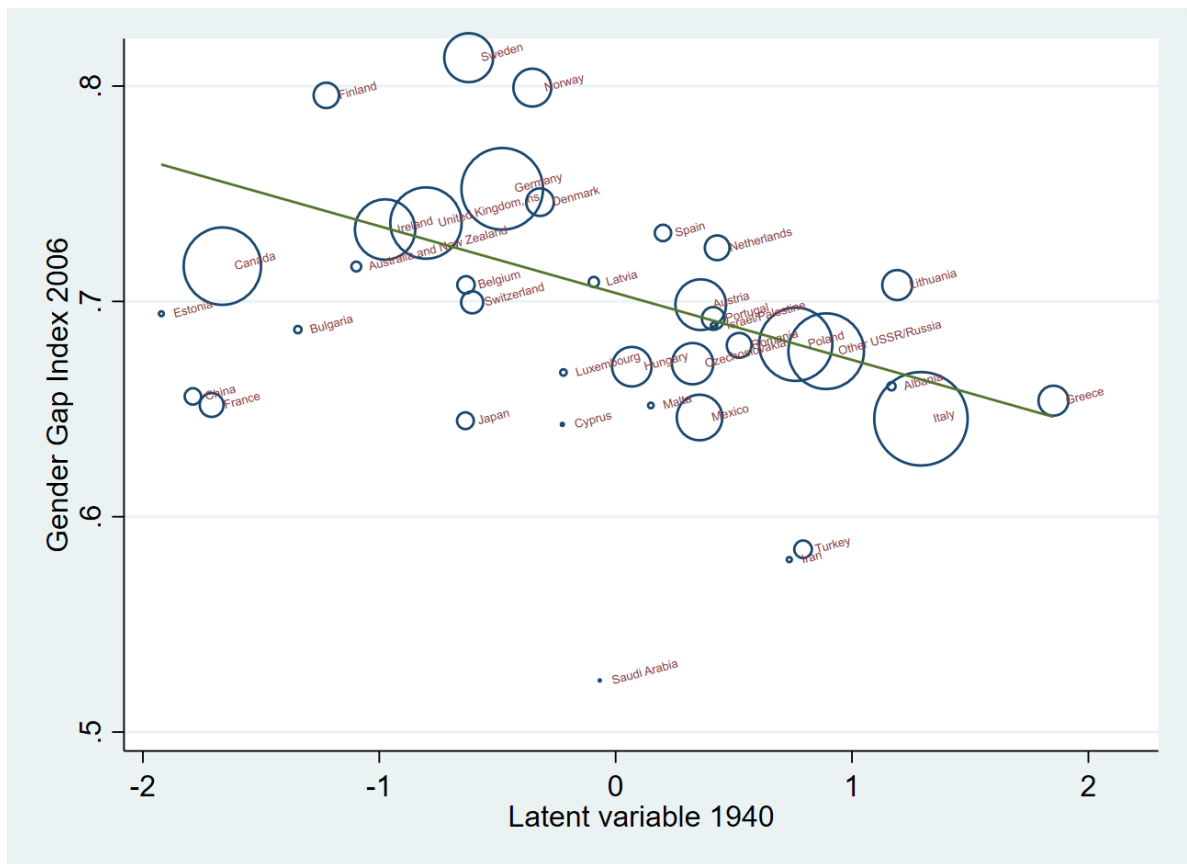


Figure 3: The Latent Variable and the Gender Gap Index 2006 (World Economic Forum).
 Notes: Relationship between the Latent Variable constructed with factor analysis using data on employment, education and fertility about first generation migrants to the US and the Gender Gap Index constructed by the World Economic Forum. Circles are proportional to the number of individuals in each country of origin.

Table 1: Descriptive statistics of gender gaps by country

Country	Employment Index	Education Index	Fertility Index	Latent Variable	N. of observations
Africa	0.65	0.01	0.40	-1.41	10,343
Albania	0.83	0.12	0.64	1.17	11,441
Australia	0.71	0.00	0.39	-1.10	16,553
Austria	0.78	0.07	0.65	0.36	480,054
Belgium	0.77	0.00	0.42	-0.63	54,148
Bulgaria	0.79	-0.12	0.49	-1.35	8,905
Canada	0.67	-0.04	0.39	-1.66	1,120,393
China	0.70	-0.13	0.67	-1.79	47,808
Cuba	0.62	0.07	0.36	-1.20	17,682
Cyprus	0.73	0.07	0.48	-0.23	1,408
Czechoslovakia	0.79	0.05	0.67	0.32	316,286
Denmark	0.80	0.02	0.38	-0.32	139,334
Estonia	0.64	-0.03	0.30	-1.92	3,687
Finland	0.71	-0.03	0.44	-1.22	118,044
France	0.64	-0.01	0.34	-1.71	103,954
Germany	0.74	0.05	0.35	-0.48	1,245,516
Gibraltar	0.77	0.06	0.49	0.00	707
Greece	0.83	0.18	0.79	1.85	164,778
Hungary	0.75	0.07	0.57	0.07	289,652
Iceland	0.73	0.08	0.45	-0.19	795
India	0.68	-0.18	0.26	-3.04	8,184
Indonesia	0.71	-0.14	0.18	-2.62	642
Iran	0.81	0.08	0.66	0.73	3,938
Iraq	0.83	0.24	0.61	2.08	473
Ireland	0.68	0.02	0.49	-0.98	681,644
Israel/Palestine	0.76	0.12	0.50	0.42	6,536
Italy	0.79	0.13	0.86	1.29	1,633,603
Japan	0.57	0.05	1.00	-0.64	50,396
Korea	0.57	-0.10	0.62	-2.52	1,080
Latvia	0.71	0.11	0.43	-0.09	18,264
Lebanon	0.70	0.30	0.96	2.22	2,858
Lithuania	0.76	0.19	0.62	1.19	164,437
Luxembourg	0.79	0.02	0.48	-0.22	6,835
Malta	0.79	0.03	0.62	0.15	4,806
Mexico	0.78	0.01	0.88	0.35	387,100
Netherlands	0.84	0.05	0.53	0.43	111,285
Norway	0.79	0.02	0.43	-0.35	265,754
Other USSR/Russia	0.80	0.13	0.58	0.89	1,068,070
Philippines	0.71	-0.21	0.31	-2.99	44,645
Poland	0.76	0.11	0.77	0.76	1,001,398
Portugal	0.73	0.10	0.73	0.41	93,929
Puerto Rico	0.64	0.09	0.41	-0.78	70,745
Romania	0.77	0.12	0.54	0.52	112,598
Saudi Arabia	0.79	0.00	0.68	-0.07	542
Spain	0.73	0.09	0.65	0.20	48,041
Sweden	0.78	0.01	0.36	-0.62	446,043
Switzerland	0.75	0.03	0.37	-0.61	88,347
Syria	0.76	0.25	0.95	2.21	46,283
Thailand	0.31	0.10	0.22	-3.30	230
Turkey	0.81	0.09	0.64	0.79	55,325
United Kingdom	0.73	0.03	0.37	-0.80	949,093
Yugoslavia	0.81	0.02	0.75	0.32	159,743
Total observations					11,684,355
Average first generation	0.75	0.06	0.57	0	
Average second generation	0.76	0.08	0.66	0	

Table 2: Individual descriptive statistics for first and second generation of immigrants

First generation immigrants								
Variable	Males				Females			
	Mean	Std. dev.	Min	Max	Mean	Std. dev.	Min	Max
Criminal (per ten thousand)	10.55	324.60	0	10,000	2.03	142.58	0	10,000
Age	50.16	14.77	0	113	49.64	15.52	0	109
Years of school	6.77	3.96	0	20	6.56	3.80	0	20
White	0.98	0.14	0	1	0.99	0.09	0	1
Married	0.73	0.44	0	1	0.68	0.47	0	1
Employed	0.72	0.45	0	1	0.18	0.38	0	1
N. of children	1.37	1.72	0	9	1.49	1.70	0	9
Observations	5,950,022				5,341,091			
Second generation immigrants								
Variable	Males				Females			
	Mean	Std. dev.	Min	Max	Mean	Std. dev.	Min	Max
Criminal (per ten thousand)	2.22	148.80	0	10,000	0.28		0	10,000
Age	19.34	11.24	0	99	19.02	11.81	0	99
Years of school	7.68	4.03	0	20	7.58	3.97	0	20
White	0.99	0.11	0	1	0.99	0.11	0	1
Married	0.08	0.28	0	1	0.11	0.31	0	1
Employed	0.38	0.48	0	1	0.27	0.44	0	1
N. of children	0.11	0.55	0	9	0.16	0.65	0	9
Observations	2,429,325				2,191,464			

Notes: The dummy criminal is in thousand. For the second generation analysis I just keep those individuals whose parents were born abroad in the same country. As a results, Guam, Iraq and Indonesia are not present in the second generation analysis

Table 3: OLS results for first generation of female immigrants

	Dependent variable: probability to be a female criminal					
	(1)	(2)	(3)	(4)	(5)	(6)
Age		8.70e-06 (6.10e-06)		8.90e-06 (6.04e-06)		8.43e-06 (5.90e-06)
Age squared		-1.01e-07 (6.50e-08)		-1.04e-07 (6.42e-08)		-1.03e-07 (6.25e-08)
Years of school		-4.45e-06 (3.98e-06)		-5.72e-06 (3.78e-06)		-6.91e-06* (3.65e-06)
White		-0.000418 (0.000294)		-0.000490* (0.000263)		-0.000565** (0.000235)
Married		-0.000248*** (5.59e-05)		-0.000249*** (5.65e-05)		-0.000250*** (5.72e-05)
Employment Gap	-0.00136*** (0.000322)	-0.00105*** (0.000369)				
Education Gap			-0.00105*** (0.000231)	-0.000901*** (0.000248)		
Fertility Index					-0.000262*** (8.39e-05)	-0.000286*** (8.21e-05)
Constant	0.00123*** (0.000240)	0.00144*** (0.000408)	0.000272*** (2.00e-05)	0.000789** (0.000307)	0.000358*** (5.69e-05)	0.00100*** (0.000288)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,522,992	5,341,091	5,522,992	5,341,091	5,522,992	5,341,091
R-squared	0.003	0.003	0.003	0.003	0.003	0.003
Relative change	-0.307	-0.246	-0.299	-0.265	-0.238	-0.269

Notes: Robust standard errors in parentheses.

Table 4: OLS results for first generation of male immigrants

Dependent variable: probability to be a male criminal						
	(1)	(2)	(3)	(4)	(5)	(6)
Age		5.93e-05*** (1.93e-05)		5.86e-05*** (1.91e-05)		5.16e-05*** (1.92e-05)
Age squared		-9.01e-07*** (1.47e-07)		-8.94e-07*** (1.58e-07)		-8.17e-07*** (1.46e-07)
Years of school		-0.000105*** (2.39e-05)		-0.000105*** (2.58e-05)		-9.43e-05*** (2.02e-05)
White		-0.000656 (0.000636)		-0.000650 (0.000643)		-0.000950 (0.000636)
Married		-0.00199*** (0.000299)		-0.00199*** (0.000298)		-0.00200*** (0.000302)
Employment Gap	-0.00322* (0.00192)	-0.00354** (0.00167)				
Education Gap			-0.00226** (0.000872)	-0.00234* (0.00116)		
Fertility Index					0.000846 (0.000709)	0.000128 (0.000555)
Constant	0.00352** (0.00146)	0.00603*** (0.00159)	0.00123*** (0.000160)	0.00350*** (0.00109)	0.000592 (0.000372)	0.00366*** (0.00107)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,161,363	5,950,022	6,161,363	5,950,022	6,161,363	5,950,022
R-squared	0.002	0.003	0.002	0.003	0.002	0.003
Relative change	-0.138	-0.156	-0.136	-0.145	0.154	0.0239

Notes: Robust standard errors in parentheses.

Table 5: OLS results for second generation of female immigrants

Dependent variable: probability to be a female criminal						
	(1)	(2)	(3)	(4)	(5)	(6)
Employment Gap	-0.000463** (0.000218)	-0.000303* (0.000180)				
Education Gap			-0.000349** (0.000145)	-0.000204* (0.000106)		
Fertility Index					-0.000129*** (3.47e-05)	-6.97e-05*** (2.21e-05)
Constant	0.000383** (0.000168)	0.000168 (0.000116)	5.82e-05*** (1.63e-05)	-1.26e-05 (1.99e-05)	0.000115*** (2.78e-05)	3.95e-05 (2.93e-05)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individual controls	No	Yes	No	Yes	No	Yes
Observations	2,602,062	2,516,878	2,602,062	2,516,878	2,602,008	2,516,829
R-squared	0.000	0.000	0.000	0.000	0.000	0.000
Relative change	-0.662	-0.429	-0.664	-0.384	-0.809	-0.432

Notes: Robust standard errors in parentheses.

Table 6: OLS results for second generation of male immigrants

Dependent variable: probability to be a male criminal						
	(1)	(2)	(3)	(4)	(5)	(6)
Employment Gap	-0.00178** (0.000733)	-0.00136** (0.000535)				
Education Gap			-0.00149*** (0.000383)	-0.00103*** (0.000328)		
Fertility Index					-0.000433*** (0.000154)	-0.000264** (0.000111)
Constant	0.00158*** (0.000572)	0.000659 (0.000442)	0.000339*** (5.05e-05)	-0.000150 (0.000216)	0.000504*** (0.000119)	4.06e-05 (0.000212)
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individual controls	No	Yes	No	Yes	No	Yes
Observations	2,873,149	2,781,861	2,873,149	2,781,861	2,873,096	2,781,810
R-squared	0.000	0.001	0.000	0.001	0.000	0.001
Relative change	-0.346	-0.265	-0.387	-0.269	-0.368	-0.225

Notes: Robust standard errors in parentheses.

Table 7: Latent variable approach: OLS results for first generation immigrants

Dependent variable: probability to be a criminal				
	Females		Males	
	(1)	(2)	(3)	(4)
Age		9.19e-06 (6.12e-06)		5.82e-05*** (1.94e-05)
Age squared		-1.09e-07* (6.50e-08)		-8.93e-07*** (1.53e-07)
Years of school		-7.54e-06* (4.04e-06)		-0.000106*** (2.42e-05)
White		-0.000474* (0.000264)		-0.000749 (0.000625)
Married		-0.000247*** (5.65e-05)		-0.00199*** (0.000299)
Latent Variable	-7.00e-05*** (1.24e-05)	-6.47e-05*** (1.40e-05)	-6.98e-05 (7.11e-05)	-0.000127** (6.12e-05)
Constant	0.000207*** (1.39e-05)	0.000726** (0.000312)	0.00109*** (0.000120)	0.00349*** (0.00110)
State Fixed Effects	Yes	Yes	Yes	Yes
Observations	5,522,992	5,341,091	6,161,363	5,950,022
R-squared	0.003	0.003	0.002	0.003
Relative change	-0.327	-0.313	-0.0652	-0.122

Notes: Robust standard errors in parentheses.

Table 8: Latent variable approach: OLS results for second generation immigrants

Dependent variable: probability to be a criminal				
	Females		Males	
	(1)	(2)	(3)	(4)
Latent Variable	-2.49e-05*** (8.29e-06)	-1.44e-05** (5.99e-06)	-9.68e-05*** (2.44e-05)	-6.57e-05*** (2.02e-05)
Constant	2.99e-05*** (5.63e-06)	-3.75e-05** (1.71e-05)	0.000219*** (2.38e-05)	-0.000266 (0.000235)
State Fixed Effects	Yes	Yes	Yes	Yes
Individual controls	No	Yes	No	Yes
Observations	2,601,996	2,516,817	2,873,084	2,781,800
R-squared	0.000	0.000	0.000	0.001
Relative change	-0.834	-0.478	-0.441	-0.299

Notes: Robust standard errors in parentheses.

Table 9: Robustness checks for the first generation of female immigrants

Dependent variable: probability to be a female criminal					
	(1)	(2)	(3)	(4)	(5)
	Logit	Probit	Additional controls	Continent FE	WEF-GGI 2006
Latent variable	-0.261*** (0.0461)	-0.0825*** (0.0138)	-3.81e-05*** (1.38e-05)	-5.86e-05*** (1.98e-05)	
N. of children			-0.000123*** (1.68e-05)		
Employed			-0.000205*** (4.45e-05)		
WEF-GGI 2006					0.00101*** (0.000311)
Constant	-6.742*** (1.060)	-3.004*** (0.303)	0.000847*** (0.000281)	0.000714** (0.000307)	-6.67e-06 (0.000375)
Observations	5,226,048	5,226,048	5,341,091	5,341,091	5,210,626
R-squared			0.003	0.003	0.003
Relative change	-0.256	-0.269	-0.184	-0.284	0.226

Notes: In all regressions there are individual controls. Robust standard errors in parentheses.

Table 10: Robustness checks for the first generation of male immigrants

	Dependent variable: probability to be a female criminal				
	(1)	(2)	(3)	(4)	(5)
	Logit	Probit	Additional controls	Continent FE	WEF-GGI 2006
Latent variable	-0.261*** (0.0461)	-0.0825*** (0.0138)	-3.81e-05*** (1.38e-05)	-5.86e-05*** (1.98e-05)	
N. of children			-0.000123*** (1.68e-05)		
Employed			-0.000205*** (4.45e-05)		
WEF-GGI 2006					0.00101*** (0.000311)
Constant	-6.742*** (1.060)	-3.004*** (0.303)	0.000847*** (0.000281)	0.000714** (0.000307)	-6.67e-06 (0.000375)
Observations	5,226,048	5,226,048	5,341,091	5,341,091	5,210,626
R-squared			0.003	0.003	0.003
Relative change	-0.256	-0.269	-0.184	-0.284	0.226

Notes: In all regressions there are individual controls. Robust standard errors in parentheses.

Table 11: Robustness checks for the second generation of female immigrants

	Dependent variable: probability to be a female criminal				
	(1)	(2)	(3)	(4)	(5)
	Logit	Probit	Additional controls	Continent FE	WEF-GGI 2006
Latent variable	-0.189 (0.169)	-0.0647 (0.0458)	-1.46e-05** (6.53e-06)	-1.83e-05*** (6.01e-06)	
N. of children			-7.57e-05*** (2.75e-05)		
Employed			-8.63e-05** (3.62e-05)		
WEF-GGI 2006					0.000255** (0.000106)
Constant	-14.42*** (0.864)	-5.029*** (0.219)	-8.30e-05*** (2.79e-05)	-7.36e-05*** (2.55e-05)	-0.000189*** (6.62e-05)
Observations	1,833,893	1,833,893	2,191,464	2,191,464	2,122,483
R-squared			0.001	0.000	0.000
Relative change	-0.179	-0.220	-0.508	-0.635	0.371

Notes: In all regressions there are individual controls. Robust standard errors in parentheses.

Table 12: Robustness checks for the second generation of male immigrants

	Dependent variable: probability to be a male criminal				
	(1) Logit	(2) Probit	(3) Additional controls	(4) Continent FE	(5) WEF-GGI 2006
Latent variable	-0.257*** (0.0770)	-0.0726*** (0.0216)	-9.05e-05*** (2.45e-05)	-7.12e-05** (3.21e-05)	
N. of children			-0.000470*** (4.60e-05)		
Employed			-0.00109*** (0.000224)		
WEF-GGI 2006					0.000677 (0.000759)
Constant	-10.92*** (1.254)	-4.117*** (0.374)	-0.000815*** (0.000280)	-0.000254 (0.000236)	-0.000691 (0.000569)
Observations	2,357,056	2,357,056	2,429,325	2,429,325	2,350,872
R-squared			0.002	0.001	0.001
Relative change	-0.247	-0.242	-0.397	-0.313	0.130

Notes: In all regressions there are individual controls. Robust standard errors in parentheses.